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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Application Number: 09/491,675
Filing Date: January 26, 2000
Appellant(s): MULTER ET AL.

Brian I. Marcus
<u>For Appellant</u>

EXAMINER'S ANSWER

This is in response to the appeal brief filed December 12, 2005 and re-submitted on

March 3, 2008 appealing from the Office action mailed November 9, 2004.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial

proceedings which will directly affect or be directly affected by or have a bearing on the

Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection

contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

Claims 49 – 53, 55 – 61, 63 – 70 and 72 – 75 are rejected under 35

U.S.C. 102(e) as being anticipated by Alley et al ('Alley'), US Patent 5,710,922.

NEW GROUND(S) OF REJECTION

Claims 49 – 53, 55 – 61, 63 – 65 are rejected under 35 U.S.C. 101 because the

claimed invention is directed to non-statutory subject matter.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5,710,922   ALLEY et al.   01-1998

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

NEW GROUND(S) OF REJECTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

Claims 49 – 53, 55 – 61, 63 – 65 are rejected under 35 U.S.C. 101 because the

claimed invention is directed to non-statutory subject matter.

Claims 49 – 53, 55 – 61 and 63 – 65 are directed towards a data synchronization

system. However, it is noted that the use of the word "system" does not inherently

mean that the claims are directed towards a machine or article of manufacture. The

claimed invention as in claims 49 – 53, 55 – 60 is also addressed to a data synchronizer

and a network for coupling the file system, all of which can be interpreted as comprising

entirely of software per se. The claimed invention as in claims 61, 63 – 65 is also

addressed to a server, a file system and a differencing synchronizer, all of which can be

interpreted as comprising entirely of software per se (the system comprises client

software which provides the functions of the differencing transmitter 100, differencing

receiver 102, and differencing synchronizer 104 in the form of a device engine (instant

specification page 14, lines 24 – 26) and Network 700 may couple the devices to one or

more specialized function servers . . .such devices may comprises . . . . a web browser

610 (instant specification page 13, lines 17 – 23).

Accordingly, the claims become nothing more than sets of software instructions

which are "software per se".

"Software per se" is non-statutory under 35 USC 101 because it is merely a set

instructions without any defined tangible output or tangible result being produced. The

requirement for tangible result under 35 USC 101 is defined in *State Street Bank &*

Trust Co. v. Signature Financial Group Inc., 149 F.3d 1368, 47USPQ2d 1596 (Fed. Cir.

1998).

Therefore, the claim language fails to provide the necessary hardware required

for the claim to fall within the statutory category of a machine or article of manufacture.

According to MPEP 2106:

The claims lack the necessary physical articles or objects to constitute a machine

or a manufacture within the meaning of 35 USC 101. They are clearly not a series of

steps or acts to be a process nor are they a combination of chemical compounds to be

a composition of matter. As such, they fail to fall within a statutory category. They are, at

best, functional descriptive material *per se*.

Descriptive material can be characterized as either "functional descriptive

material" or "nonfunctional descriptive material." Both types of "descriptive material" are

nonstatutory when claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d

at 1759. When functional descriptive material is recorded on some computer-readable

medium, it becomes structurally and functionally interrelated to the medium and will be

statutory in most cases since use of technology permits the function of the descriptive

material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d

1031, 1035 (Fed. Cir. 1994)

Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored on

a computer-readable medium, in a computer, or on an electromagnetic carrier signal,

does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that

the claims for an algorithm in *Benson* were unpatentable as abstract ideas because

"[t]he sole practical application of the algorithm was in connection with the programming

of a general purpose computer.").

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act

of 1999 (AIPA) and the Intellectual Property and High Technology Technical

Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 49 – 53, 55 – 61, 63 – 70 and 72 – 75 are rejected under 35 U.S.C. 102(e) as being anticipated by Alley et al ('Alley'), US Patent 5,710,922.

As to claim 49, Alley discloses a data synchronization system for a first system having a plurality of data sources each with a data source format, and a second system having a plurality of data sources each with a data source format (see col. 2, lines 5-27, Fig. 3). Alley teaches 'a first data synchronizer on the first system transmitting at least one set of difference information to an output' (col. 2, lines 5-27 et seq). Alley teaches 'a second data synchronizer on the second system capable of receiving said at least one set of difference information' (col. 2, lines 55-67, Fig. 2 et seq) Finally, Alley teaches 'a network for coupling (see col. 7, lines 64 to col. 8, lines 18, Fig. 3, Alley) the first file system,…, remote from each other' as (col. 2, lines 49 – 67, Fig. 3 et seq).

As to claim 50, Alley teaches 'difference information comprises change transactions from the data source to the data destination' (col. 3, lines 4-17).

As to claim 51, Alley teaches 'a data source interface' (col. 7, lines 64 to col. 8, lines 15, Fig. 3). Further, Alley teaches 'a copy of a previous state of each said data source' (col. 2, lines 56-67). Alley teaches 'a source data constructor applying

difference information to said copy' as (col. 2, lines 56-67 et seq). Finally, Alley teaches 'a difference information generator' as (col. 2, lines 56-67 et seq).

As to claim 52, Alley teaches 'difference information is transmitted from said first synchronizer to said second synchronizer in a universal format' as (col. 2, lines 56-67 et seq).

As to claim 53, Alley teaches 'data synchronizer includes a plurality of difference source interfaces, each corresponding to a data source format' as (col. 2, lines 56-67 et seq).

As to claim 55, Alley teaches 'network is the Internet' (Fig. 3 et seq).

As to claim 56, Alley teaches 'first system is a server and said second system is a device capable of communicating with said server' as (see col. 2, lines 5-24 et seq).

As to claim 57, Alley teaches 'first and second systems are coupled to a storage server, and said difference information is transmitted to said storage server by said first synchronizer and retrieved from said storage server by said second synchronizer' as (see col. 2, lines 5-24 et seq).

As to claim 58, Alley teaches 'systems are coupled to said storage server via the Internet' as (see col. 2, lines 5-24 et seq).

As to claim 59, Alley teaches 'a management server communicating with said first and second data synchronizers' as (see col. 2, lines 5-24 et seq)

As to claim 60, Alley teaches 'management server indicates a location on the storage server where difference information for said synchronizers are stored' as (see col. 2, lines 5-24, Fig. 3 et seq).

As to claim 66, Alley discloses a method for synchronizing at least a first file and a second file resident on a first and a second systems, respectively (see col. 2, lines 5-24 et seq). Alley teaches 'determining difference data resulting from changes to a first file on the first system' (see col. 2, lines 5-24 et seq). Further, Alley teaches 'transmitting the difference information to a second system' as (col. 3, lines 4-18 et seq). Alley teaches 'applying the difference information to generate change data for the second file' as (col. 2, lines 55-67 et seq). Finally, Alley teaches, 'updating the second file on the second system with the difference data' as (col. 2, lines 55-67 et seq).

As to claim 67, Alley teaches 'comparing data from the first file to a copy of a previous state of data from the first file' as (col. 2, lines 55-67 et seq).

As to claim 72, Alley teaches 'the network is the Internet' as (Fig. 3 et seq).

As to claim 73, Alley teaches 'step of transmitting comprises coupling the first system and the second system to a server and transmitting said information from the first system to the server, and from the server to second system' as (col. 3, lines 5-25 et seq)

As to claim 74, Alley teaches 'step of coupling includes coupling the first and second system to the server via a network' as (col. 2, lines 5-24 et seq).

As to claim 75, Alley teaches 'the network is the Internet' (Fig. 3 et seq).

As to claim 61, Alley disclose a data synchronization system (see col. 2, lines 5-24 et seq). Alley teaches 'a server' as synchronize a new user dataset, such as one in a server computer that stores user information (see col. 2, lines 5-24 et seq). Alley teaches 'a network to which the server is operatively coupled' as (col. 2, lines 55-67,

Fig. 3 et seq). Further, Alley teaches 'a first system having a plurality of data file types' as (see col. 2, lines 5-24 et seq). Alley teaches 'a differencing synchronizer on the first system extracting a first set of differencing data from the data files on the first system when the data files on the system are changed, outputting the differencing data to the server, and retrieving differencing data from the server and applying it to selected data files on the first system' as (see col. 2, lines 5-24, Abstract et seq). Alley teaches 'at least one second system having a second plurality of data file types on the second system' as (see col. 2, lines 5-24 et seq) Finally, Alley teaches 'a differencing synchronizer on the second system the differencing data from the data files on the second system when the data files on the system are changed, outputting the differencing data to the server via the network, and retrieving the first set of differencing data from the server via the network and applying it to selected data files on the second system' as (col. 3, lines 4-25, col. 2, lines 4-24 et seq).

As to claim 63, Alley teaches 'systems are coupled via the Internet' (see Fig. 3 et seq).

As to claim 64, Alley teaches 'a server coupled to each of said first and second systems to receive, store, and output said first set and said second set of differencing data' as (see col. 2, lines 5-24 et seq).

As to claim 65, Alley teaches 'first system is a server and said second system is a device capable of communicating with said server' as (col. 2, lines 4-25, Fig. 3 et seq)

As to claim 68, Alley teaches 'comparing step comprises data from said first file, converting said data to a universal file format, providing 'said copy of said data in said

universal format, and comparing said data and said copy to provide difference data in said universal format' as (col. 2, lines 55-67).

As to claim 69, Alley teaches 'constructing new file data for said second file in said universal data format' as (col. 2, lines 4-25, Fig. 3).

As to claim 70, Alley teaches 'updating comprises translating said new file data into a format of said second file' as (col. 2, lines 55-67 et seq).

(10) Response to Argument

Appellant's arguments regarding the rejection of claims 49 – 53, 55 – 61, 63 – 70 and 72 – 75:

Argument No. 1: Appellants have pointed out that the Examiner appears to have ignored the portion of Appellants' Claim 49 which recites, "... when the first and second file systems are physically remote from each other." The Examiner has not addressed this portion of Appellants' argument and has not explained where Alley discloses, teaches or even suggests this limitation (Page 13, The Brief).

Argument No. 2: Appellants argue that Alley does not disclose, teach or suggest a system as in the present invention whereby application specific data is first converted

to a universal format, and then this universal format data is used for a comparison against a stored prior version of the data (Pages 13, 14 and 15, The Brief).

Examiner's Response to Arguments:

In response to Argument No. 1:

Examiner is entitled to give claim limitations their broadest reasonable interpretation in light of the specification. See MPEP 2111 [R-1]

Interpretation of Claims-Broadest Reasonable Interpretation

During patent examination, the pending claims must be 'given the broadest reasonable interpretation consistent with the specification.' Applicant always has the opportunity to amend the claims during prosecussion and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 162 USPQ 541,550-51 (CCPA 1969).

Alley teaches a method for synchronizing the data between two separate computer systems. The method includes the step of identifying each record stored in the memory of the first computer system that is intended to be synchronized. The records are identified with a unique identification indicia and an indicia that indicates the last time that the record was altered. Using the time of the last synchronization information, each of the selected records that was added to or deleted from one of the computer systems since the last synchronization is identified and added to or deleted

from the other computer system. Each of the records that was modified on one computer system is modified on the other. If conflicting actions have occurred on the two computer systems, then the conflicts are handled in accordance with a predetermined protocol. A synchronization list is created that identifies each of these additions, deletions and modifications and either prioritizes them in accordance with the protocol or informs the user of the conflicts.

In response to appellant's arguments the Examiner respectfully submits that Alley teaches a remote/local ("network computer coupled") docking system 72 in accordance with the block diagram form with the data transfer routes shown in arrows. The system 72 includes a remote system 74 (such as the **aforementioned pen-based computer 10**) and a local system 76 (such as a Macintosh computer system). The remote system 74 includes a docker interface 78, which is a relatively compact piece of code running on system 74 which allows the remote system to communicate with a larger docker application 80 running on the local system 76. The docker interface 78 is conveniently stored within the "drawer" of the system 10 described previously, and is activated by opening the drawer with the drawer button 65 and "clicking" on its icon with stylus 38. The communication between docker interface 78 and docker application 80 is preferably bidirectional, as indicated by arrow 82. The docker application communicates bi-directionally with a synchronization or "sync" file 84 as indicated by arrow 86. The docker application also communicates with an achieve file 88 so that

data may be sent from the synchronization file 84 to the archive file 88 as indicated by a
unidirectional arrow 90 (see col. 7, lines 64 to col. 8, lines 18, Fig. 3, Alley).

Alley teaches for identifying each record stored in the memory of a first computer
system (network computer) that is intended to be synchronized. The records are
identified with unique identification indicia and indicia that indicate the last time that the
record was altered. To begin synchronization, communication between the first
computer system and the second computer system is initiated, and the last time that the
records of the first computer system were synchronized with the second computer
system is identified. Using the time of the last synchronization information, each of the
selected records that was deleted on the first computer system since the last
synchronization is identified and for each such deleted record on the first computer
system, the corresponding record from the second computer system is deleted. Each of
the selected records that was added to the first computer system since the last
synchronization are identified and copied to the second computer system to create a
corresponding record in the second computer system. Each of the selected records in
the first computer system that has both a corresponding record in the second computer
system and which was modified on the first computer system since the last
synchronization is identified and synchronized (see col. 2, lines 5-27, Alley).

In response to Argument No. 2:

In response to appellant's arguments the Examiner respectfully submits that Alley teaches a synchronization list is created that identifies: 1) each of the selected records that was deleted on the first computer system since the last synchronization but still exists on the second computer system; 2) each of the selected records that was deleted on the second computer system since the last synchronization but still exists on the first computer system; 3) each of the selected records that was added to the first computer system; and 4) each of the selected records that was added to the second computer system. The synchronization list is then modified in accordance with a predetermined protocol and the modified list is used to synchronize the first and second computer systems. Records that have been deleted on one of the computer systems are deleted from the other and records that have been added to one of the computer systems are generally added to the other (col. 2, lines 55-67 et seq., Alley).

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

This examiner's answer contains a new ground of rejection set forth in section **(9)** above. Accordingly, appellant must within **TWO MONTHS** from the date of this answer exercise one of the following two options to avoid *sua sponte* **dismissal of the appeal** as to the claims subject to the new ground of rejection:

(1) **Reopen prosecution.** Request that prosecution be reopened before the primary examiner by filing a reply under 37 CFR 1.111 with or without amendment, affidavit or other evidence. Any amendment, affidavit or other evidence must be relevant to the new grounds of rejection. A request that complies with 37 CFR 41.39(b)(1) will be entered and considered. Any request that prosecution be reopened will be treated as a request to withdraw the appeal.

(2) **Maintain appeal.** Request that the appeal be maintained by filing a reply brief as set forth in 37 CFR 41.41. Such a reply brief must address each new ground of rejection as set forth in 37 CFR 41.37(c)(1)(vii) and should be in compliance with the other requirements of 37 CFR 41.37(c). If a reply brief filed pursuant to 37 CFR 41.39(b)(2) is accompanied by any amendment, affidavit or other evidence, it shall be treated as a request that prosecution be reopened before the primary examiner under 37 CFR 41.39(b)(1).

Extensions of time under 37 CFR 1.136(a) are not applicable to the TWO MONTH time period set forth above. See 37 CFR 1.136(b) for extensions of time to reply for patent applications and 37 CFR 1.550(c) for extensions of time to reply for ex parte reexamination proceedings.

Respectfully submitted,

/Shahid Al Alam/

Primary Examiner, Art Unit 2162

A Technology Center Director or designee must personally approve the

new ground(s) of rejection set forth in section (9) above by signing below:

_____

Conferees:

/John Breene/

Supervisory Patent Examiner, Art Unit 2162

Eddie Lee

Appeal Specialist

/Eddie C. Lee/

Supervisory Patent Examiner, TC 2100